JC10 Rec'd PCT/PT0 1 9-TA 139 Re 2015;
Approved for use through 3/31/2007. OMB 0651-0021
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

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TRANSMITTAL LETTER TO THE UNITED STATES **DESIGNATED/ELECTED OFFICE (DO/EO/US)**

ATTORNEY'S DOCKET NUMBER 20030076-US

CO	NCERNING A SUBMISSIO	U.S. APPLE 100 No. ((Krapwa-see 37 GFR 1.5)								
PCT/	IATIONAL APPLICATION NO. /US2003/038190	INTERNATIONAL FILING DATE 25.11.2003 (25 NOV 2003)	PRIORITY DATE CLAIMED 14.04.2003 (14 April 2003)							
TITLE O	JOINT SYMBOL, A	AMPLITUDE, AND RATE ESTIMAT								
APPLICA	APPLICANT(S) FOR DO/EO/US MCELWAIN, Thomas P.									
Applicar			O/US) the following items and other information:							
1.	This is a FIRST submission of items concerning a submission under 35 U.S.C. 371.									
2.	This is a SECOND or SUBSEQUENT submission of items concerning a submission under 35 U.S.C. 371.									
3.	This is an express request to begin national examination procedures (35 U.S.C. 371(f)). The submission must include items (5), (6), (9) and (21) indicated below.									
4.	The US has been elected (Article 31).									
5.	A copy of the International Application as filed (35 U.S.C. 371(c)(2))									
	a. is attached hereto (required only if not communicated by the International Bureau).									
	b. has been communicated by	/ the International Bureau.								
	c. is not required, as the application was filed in the United States Receiving Office (RO/US).									
6. 📖		ne International Application as filed (35 U.S.C	C. 371(c)(2)).							
	a. Lis attached hereto.									
	, ,	itted under 35 U.S.C. 154(d)(4).								
7.		ernational Application under PCT Article 19 (
1	a. are attached hereto (required only if not communicated by the International Bureau).									
	b. — have been communicated by the International Bureau.									
	c. Have not been made; however, the time limit for making such amendments has NOT expired.									
	d. have not been made and w									
8		ne amendments to the claims under PCT Art	ticle 19 (35 U.S.C. 371(c)(3)).							
9. لـــا		An oath or declaration of the inventor(s) (35 U.S.C. 371(c)(4)). An English language translation of the annexes of the International Preliminary Examination Report under PCT								
10	An English language translation of the Article 36 (35 U.S.C. 371(c)(5)).	annexes of the International Preliminary E.	xamination Report under PCT							
Items	Items 11 to 20 below concern document(s) or information included:									
11. 🔲	An Information Disclosure Statement	under 37 CFR 1.97 and 1.98.	•							
12.	An assignment document for recording	ng. A separate cover sheet in compliance wit	th 37 CFR 3.28 and 3.31 is included.							
13.	A preliminary amendment.	A preliminary amendment.								
14.	An Application Data Sheet under 37 C	CFR 1.76. 3 pages								
15.	A substitute specification.									
16.	A power of attorney and/or change of a	address letter.								
17.	A computer-readable form of the sequ	uence listing in accordance with PCT Rule 1	3ter.2 and 37 CFR 1.821- 1.825.							
18.	A second copy of the published Interne	national Application under 35 U.S.C. 154(d)(4	.4).							
19. 🗀	A second copy of the English language translation of the international application under 35 U.S.C. 154(d)(4).									
20.	Other items or information: Notification	PCT application no. PCT/US2003/03819	90 as filed - 66 pages, Form PCT/IB/301							

This collection of information is required by 37 CFR 1.414 and 1.491-1.492. The information is required to obtain or retain a benefit by the public, which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11 and 1.14. This collection is estimated to take 15 minutes to complete, including gathering information, preparing, and submitting the completed form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Mail Stop PCT, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.



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PTO-1390 (Rev. 02-2005)
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U.S. APPLICATION	N NO. (if know	n, see 37 CFR 1.5) INTERNATIONAL APPLICATION NO.		ATTORNEY'S DOCKET NUMBER					
	The following fees have been submitted					20030076-US			
i i	-	CALCULATIONS	PTO USE ONLY						
21. 🗹 Basic	national fee	\$ 300							
22. Examir If International pre PCT Article 33(All other situations	l)-(4)	\$ 200							
23. Search Search fee (37 CFI International International Search All other situations.	R 1.445(a)(2)) h Il Searching Au h Report prepa	s 100							
т	OTAL OF 21, 2	\$ 600							
Additional fee to sequence listing The fee is \$25	or specification ng or computer 0 for each addi								
Total Sheets	Extra Sheets	Number of eac thereof (round	ch additional 50 or fraction up to a whole number)	RATE					
- 100 =	/50 =			× \$250	\$ O				
Surcharge of \$130. claimed priority date	00 for furnishing (37 CFR 1.49)	\$ O							
CLAIMS	NUMB	ER FILED	NUMBER EXTRA	RATE	\$				
Total claims	3	0 - 20 =	10	x \$ 50	\$ 500	T			
Independent claims	6	- 3 =	3	× \$200	\$ 600				
MULTIPLE DEPEN	DENT CLAIM(S) (if applicable)		+ \$360	\$ 0	 			
			TOTAL OF ABOVE	CALCULATIONS =	\$ 1700	 			
Applicant claim	s small entity st	0							
				SUBTOTAL =	s 1700				
Processing fee of \$ claimed priority date	130.00 for furnis (37 CFR 1.492	\$ 0							
		\$ 1700							
Fee for recording the by an appropriate co	e enclosed assi over sheet (37 (\$ 0							
			TOTAL F	EES ENCLOSED =	\$ 1700				
		Amount to be refunded:	\$						
		Amount to be charged:	\$						
a. A check in the amount of \$ to cover the above fees is enclosed.									
b. Please charge my Deposit Account No. 190130 in the amount of \$ 1700 to cover the above fees. A duplicate copy of this sheet is enclosed.									
c. The Commissioner is hereby authorized to charge any additional fees which may be required, or credit any overpayment to Deposit Account No. 190130. A duplicate copy of this sheet is enclosed.									
d. Fees are to be charged to a credit card. WARNING: Information on this form may become public. Credit card information should not									
be included on this form. Provide credit card information and authorization on PTO-2038. NOTE: Where an appropriate time limit under 37 CFR 1.495 has not been met, a petition to revive (37 CFR 1.137(a) or (b)) must be filed and granted to restore the International Application to pending status.									
			on to pending status.	0	_ 1				
SEND ALL CORRES		W Chan							
Customer No. 4. Maine & Asmus	2110	1							
PO Box 3445		nus							
Nashua, NH 030									
United States of	America	N NUMBER							

10/531772

PCT INTERNATIONAL APPLICATION TRANSMITTAL LETTER TRANSMITTAL DATE: **25 NOVEMBER 2003** REGARDING THE APPLICATION OF: BAE SYSTEMS INFORMATION & RCVDBY **ELECTRONIC SYSTEMS** INTEGRATION INC INTERNATIONAL APPLICATION NO. CAL: INTERNATIONAL FILING DATE: **HEREIN** ATTORNEY DOCKET NO: 20030076-PCT NOTICE ENTITLED: JOINT SYMBOL, AMPLITUDE, AND RATE ESTIMATOR T/S EXPRESS MAIL CERT: EL 962 755 142 US DATE: 25 November 2003

I certify that this application is being deposited with the U.S. Postal Service EXPRESS MAIL POST OFFICE TO ADDRESSEE under 37 CFR 1.10 on the date indicated above and is addressed to Mail Stop PCT, Commissioner for Patents, PO Box 1450, Alexandria. VA 22313-1450.

[🗷] Scott J. Asmus, Reg. No. 42,269 [] Neil F. Maloney, Reg. No. 42,833 [X] Dobra A. Stengel -

To the United States Receiving Office (RO/US):

Accompanying this transmittal letter is the above-identified application comprising 6 page PCT Easy Request, 2 page PCT Easy Fee Calc Sheet, 1 floppy disk of PCT Easy application forms, 1 page executed Power of Attorney-Applicant, 1 page executed General Power of Attorney-Applicant/Inventor, 48 pages of Specification and Claims, 6 sheets of Drawings. The following requests are made of the RO/US:

- 1. [X] PREPARATION AND TRANSMITTAL OF CERTIFIED COPY OF PRIORITY DOCUMENTS- Please prepare and transmit to the International Bureau a certified copy of the United States origin priority documents identified in Box VI of the Request form (37 CFR 1.451).
- 2. [X] DISCLOSURE INFORMATION-- In order to assist in screening the accompanying International application for purposes of determining whether a license for foreign transmittal should and could be granted, the following information is supplied:
 - A. [] There is no prior filed application relating to this invention.
 - B. [X] There is one prior application, US 60/462,657, filed 14 April 2003 which contains subject matter that is
 - 1. [] substantially identical to that of the accompanying International application.
 - 2. [] less than that of the accompanying International application. The additional subject matter of the International application appears on pages(s) and line(s)
 - 3. more than that of the accompanying International application.
 - C. [] Disclosure information cannot be covered by the language of Points 2A or 2B above due to the involvement of several prior applications or for other reasons. A separate sheet on which the disclosure information is explained is attached to this transmittal letter.

3. [X] REQUEST FOR REIGN TRANSMITTAL LICENSE-- According to the provisions of 35 USC 184 and 37 CFR 5.11, a license to transmit the accompanying International application to foreign agencies or international authorities is hereby requested.

4. [X] The Office is herby authorized to charge deposit account 190130, the amount of \$2,168.00 to cover above filing fees, and any deficiency or credit any overpayment in the fees to the above deposit account, owned by BAE SYSTEMS Information and Electronic Systems Integration Inc. an authorized signator for which is Kevin M. Perkins, V.P. & Company Counsel, and for whom the undersigned are authorized agents.

Date: 4 35 NOV 2003

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Scott J. Asmus, Reg. No. 42,269 Neil F. Maloney, Reg. No. 42,833 Andrew P. Cernota, Reg. No. 52,711 Attorneys/Agents for Applicant

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of: MCELWAIN, Thomas P.

Group Art Unit:

Serial No.

Examiner:

Filed:

Herein

Atty. Dkt. No: 200300076-US

For:

JOINT SYMBOL, AMPLITUDE, AND RATE ESTIMATOR

To:

Mail Stop PCT

Fm:

42716

Commissioner for Patents P.O. Box 1450

Alexandria, VA 22313-1450

CERTIFICATE OF MAILING 37 CFR 1.10: I certify that this correspondence is being deposited on the below date with the U.S. Postal Service with sufficient postage as EXPRESS MAIL POST OFFICE TO ADDRESSEE addressed to: Mail Stop PCT, Commissioner for Patents, PO Box 1450 Alexandria, VA 22313-1450.

Debra A. Stengel or [-] Andrew P. Cernota, Reg.

Dear Honorable Commissioner:

TRANSMITTAL COVER SHEET

Submitted herewith, pursuant to 35 U.S.C. 371, is a US National Stage Patent Application of International Application No. PCT/US2003/038190 consisting of:

2 pages Transmittal Letter To The United States Designated/Elected Office Concerning a Filing Under 35 U.S.C. 371,

3 pages Application Data Sheet,

66 pages copy of PCT application as filed,

3 pages Form PCT/IB/301 Notification of Receipt of Record Copy.

DEPOSIT ACCOUNT **190130** AUTHORIZATION – The Office is hereby authorized to charge the required fee, and any deficiency or credit any overpayment in the fees to the above deposit account, owned by BAE SYSTEMS Information and Electronic Systems Integration Inc. an authorized signator for which is Kevin M. Perkins, V.P. & Company Counsel, and for whom the undersigned are authorized agents.

Respectfully submitted,

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